

Monday, November 09, 2015 10:33:02 AM

138688

TULMAR

Page 1

N900040100

Setup Start *NS1*

Stop ***NS2***

11

Cust Item ID:

11

Customer:

Reference:

Approvals: Process Plan: JMF Date: 15-11-9

Tooling: _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
B67-43001-85	D

100	Pick Kit	0.00
-----	----------	------

100

Packaging	Memo	0.00
-----------	------	------

Packaging

11 JAN 07 2016

110 Weld per dwg A/R Aluminum rod Batch: 131562 00

110

Large Fab	Memo	0.02
-----------	------	------

Large Fab 1- Assemble and weld as per dwg B67-43001 (QSI004)

2- Grind weld flush only on side of -193

11 JAN 07 2016 DAS
24
9-88

130	QC9- Inspect visual per QSI004- Fusion Welds	0.00
-----	--	------

130

QC	Memo	0.00
----	------	------

Quality Control

① 1601.03

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐			FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER :					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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		OTHER : ☐							

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

Work Order ID 138688***138688***

Page 4

Monday, November 09, 2015 10:33:02 AM

Item ID: PB67-43001-85

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: D-Pad Assembly, Long

Start Date: 11/9/2015 Start Qty: 11.00

11

Cust Item ID:

Required Date: 12/25/2015 Req'd Qty: 11.00

11

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

200

Identify as per dwg & Stock Location: *ME22*

0.00

200

Packaging

Memo

0.00

Packaging

*11**FEB 24 2016*DAS
6
9-89

210

QC21- Final Inspection - Work Order Release

0.00

210

QC

Memo

0.02

Quality Control

*MCJ**FEB 25 2016**MCJ* *FEB 25 2016*

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY							
Environment	☐	Design	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Doc/Data	☐	Offset/Setup	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Equip/Tooling	☐	Supplier	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Handling/Pre	☐	Training	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Material	☐	Use for Testing	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Internal Transport	☐	Poor Information	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Tribal Knowledge	☐	Rushing	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
LOA	☐	Product Improvement	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
Substation	☐	Process Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Past Expiry Date	☐	Manufacturing Process	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Misidentified	☐	Past Due	☐	OTHER :							

Picklist Print

Monday, November 09, 2015 10:33:01 AM

Page 1

Work Order ID: 138688

138688

Parent Item: PB67-43001-85

PB67-43001-85

Parent Item Name: D-Pad Assembly, Long

Start Date: 11/9/2015

Required Date: 12/25/2015

Start Qty: 11.00

Required Qty: 11.00

Comments: IPP rev A new issue 08.06.19 EC verified: DD
10.09.30 per rev C dwg EC verified by:DD

IPP rev B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

PB67-43001-191 Manufactured No

PR67-43001-191

D-Pad Back Plate

PB67-43001-193 Manufactured No

PR67-43001-193

D-Pad Base

Location

Loc Qty

Loc Code

Mezz2

5

112120

5

PB67-43001-195 Manufactured No

PR67-43001-195

D-Pad Face

Location

Loc Qty

Loc Code

Mezz2

2

111709

2

PB67-43001-339 Manufactured No

PR67-43001-339

D-Pad Top

Location

Loc Qty

Loc Code

Mezz2

38

111707

38

11 11
**3138671 → 11 JAN 07 2016

DAS
24
9-89

11 11
** JAN 07 2016

DAS
24
9-89

3138617 → 6

5
11
** JAN 07 2016

DAS
24
9-89

3138670 → 9

2
11
** JAN 07 2016

DAS
24
9-89

11

DQA: _____ Date: _____

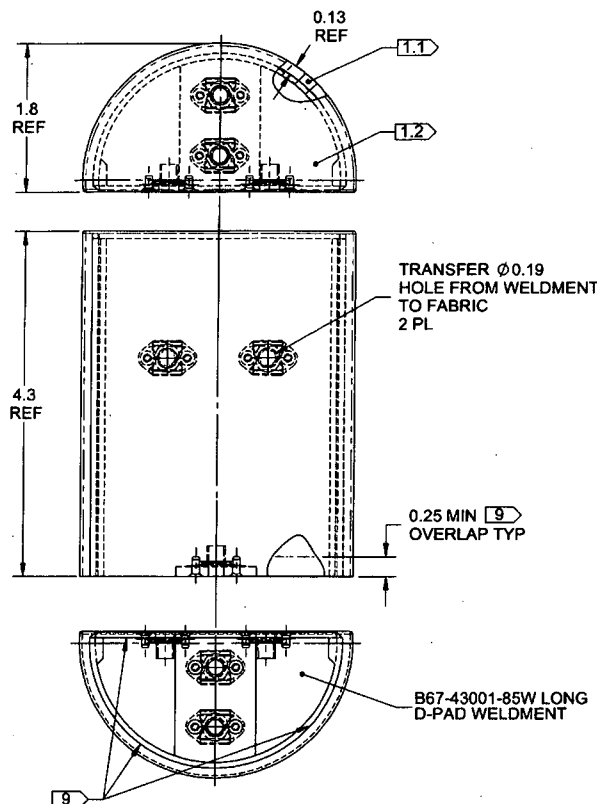


WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

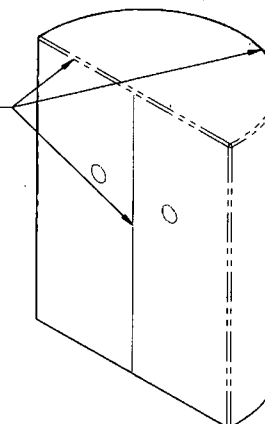
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval				
Description Work Order Deviation				Disposition							
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		FAULT CATEGORY		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
		OTHER : ☐									



ITEM	QTY	P/N	DESCRIPTION
	X	B67-43001-85	D-PAD ASSEMBLY, LONG
1	1	B67-43001-85W	LONG D-PAD WELDMENT
2	A/R	FOAM	SEE NOTE 1.1
3	A/R	FABRIC	SEE NOTE 1.2
4	A/R	ADHESIVE	SEE NOTE 1.3
5	A/R	THREAD	SEE NOTE 1.4

1.4 LOCATION OF SEWING SEAM



RELEASED
2014-12-08

B67-43001-85 D-PAD ASSEMBLY, LONG

NOTES:

- 1) MATERIAL:
 - 1.1) FOAM: SBR/EPDM/CR BLEND, BLACK, ASTM D1056 2A2, 1/8" THICK, BRITTLNESS TEMP OF -40F, IAW ASTM D 746
 - 1.2) FABRIC: 100% 420 DENIER NYLON, MIN THREAD COUNT 35X35, POLYURETHANE COATED ONE SIDE, COLOUR: BLACK
REF. TULMAR P/N 1495
 - 1.3) ADHESIVE: URETHANE WITH CATALYST, TWO PART, CLIFTON LA4009 OR LA4009NOVOC
REF. TULMAR P/N 2530
 - 1.4) THREAD: NYLON, BLACK, V-T-295 TYPE 2, CLASS A, SIZE F, 8-10 STITCHES PER INCH
REF. TULMAR P/N 2530
- 2) FINISH: BOND NEOPRENE TO COVER PLATE USING ADHESIVE. COVER WITH DENIER AS SHOWN.
- 3) TOLERANCES: PER TABLE 1 (ZN A3-1) UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.42 lbs REF
- 8) NUTPLATES AD HOLES MUST REMAIN FREE OF ADHESIVE AND FABRIC
- 9) DENIER NYLON TO OVERLAP BY 0.25 MIN AND BE BONDED ALL AROUND INNER SIDES OF PLATE

TABLE 1
TOLERANCES ON FABRIC
(PARTS AND ASSEMBLIES)

±1/8: DIMS <2
±1/4: DIMS 2 TO <10
±1/2: DIMS 10 TO <20
±5/8: DIMS 20 TO <40
±1.5: DIMS EQUAL TO OR > 40

D	FOAM AND ADHESIVE SPECS CHANGE TO MATCH SUPPLIER MATERIALS REASON: SEE PAR #14-333	DB	14.07.14
C	REDRAWN PREMIER AVIATION DRAWING IAW DART QSI 018, QSI 043 AND TULMAR SAFETY SYSTEMS INC.'S MANUFACTURING PROCESS AND TOLERANCES ON FABRIC. FOR PREVIOUS REVISIONS, REFER TO SHEET 12 OF PREMIER AVIATION DRAWING NO. B67-43001. REASON: SEE PAR#09-011.	MB	10.04.27
REV.	DESCRIPTION	BY	DATE
DESIGN	RW		
DRAWN	DB		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.	N/A		
DATE	14.07.14		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. B67-43001-85			
TITLE D-PAD ASSEMBLY, LONG			
REV. D SHEET 1 OF 2			
SCALE NTS			
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DQA: _____ Date: _____



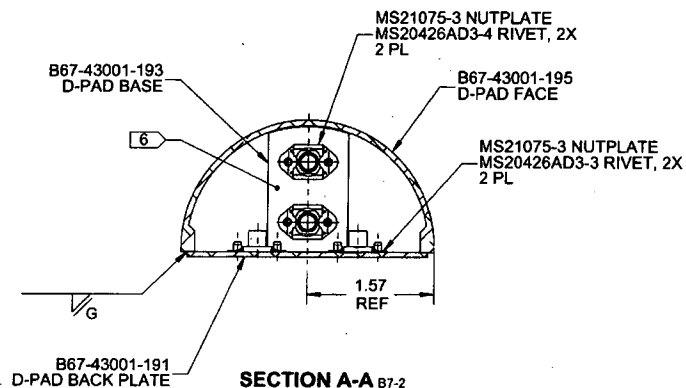
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

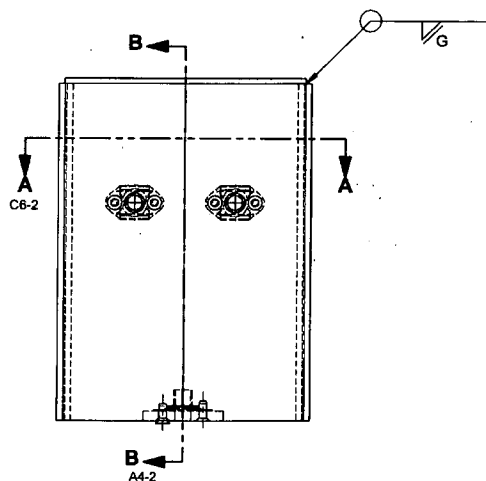
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

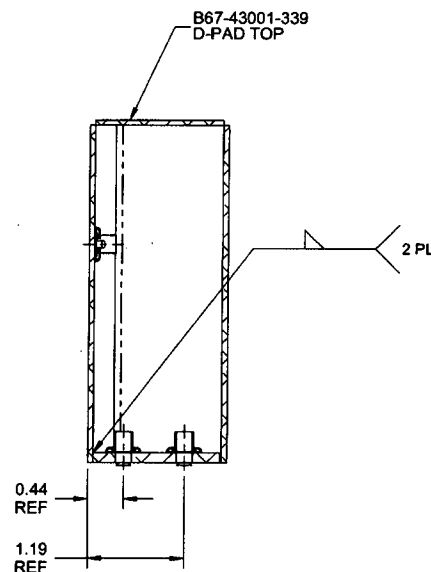
Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				



SECTION A-A B7-2



B67-43001-85W D-PAD WELDMENT, LONG



SECTION B-B B7-2

ITEM	QTY -85W	P/N	DESCRIPTION
	X	B67-43001-85W	LONG D-PAD WELDMENT
1	4	MS20426AD3-3	RIVET
2	4	MS20426AD3-4	RIVET
3	4	MS21075L3	NUT PLATE
4	1	B67-43001-195	D-PAD FACE
5	1	B67-43001-191	D-PAD BACK PLATE
6	1	B67-43001-339	D-PAD TOP
7	1	B67-43001-193	D-PAD BASE

NOTES:

- 1) MATERIAL: NONE
- 2) FINISH: POWDER COAT GREEN SANDEX (4.3.5.8) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "B67-43001-85W" AND B/N "BXXXXX" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.30 lbs
- 8) WELDING: PER DART QSI 004

RELEASED
2014-12-08

DESIGN	RW	DART AEROSPACE LTD	
DRAWN	DB	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		B67-43001-85	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.	N/A	D-PAD ASSEMBLY, LONG	NTS
DATE	14.07.14	COPYRIGHT © 1995 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DQA: _____ Date: _____



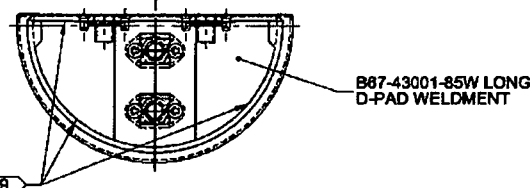
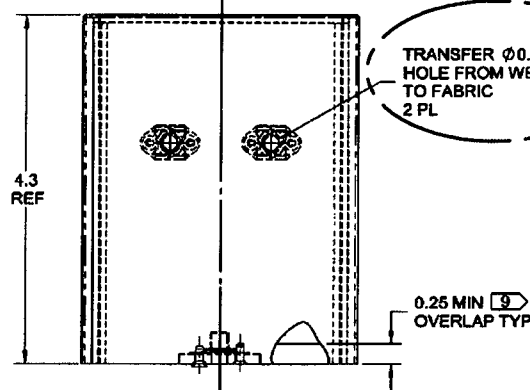
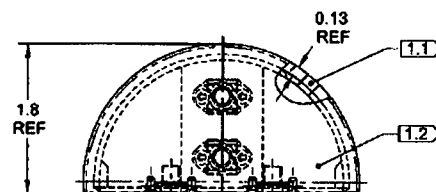
WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval				
Description Work Order Deviation				Disposition							
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter		☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes		☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center		☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence	
				OTHER :							

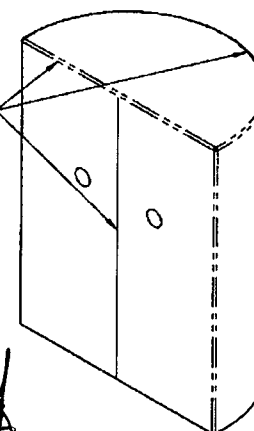
ITEM	QTY. -85	P/N	DESCRIPTION
1	X	B67-43001-85	D-PAD ASSEMBLY, LONG
2	1	B67-43001-85W	LONG D-PAD WELDMENT
3	A/R	1637-002	SEE NOTE 1.1
4	A/R	1485	SEE NOTE 1.2
5	A/R	LA4009	SEE NOTE 1.3
6	A/R	2530	SEE NOTE 1.4



THE TWO 0.19" DIA. HOLES
ARE TO BE DONE BY DART.

DAS
22
9-89

1.4 LOCATION OF
SEWING SEAM



TULMAR MARK-UP
REV 2
03/06/2013 RL

DAS
22
9-89

B67-43001-85 D-PAD ASSEMBLY, LONG

FOAM, SBR/EPDM/CR BLEND, BLACK, ASTM D1056 2A2, 1/8" THK.,
BRITTLNESS TEMP OF -40F., IAW ASTM D 746.

NOTES:

1) MATERIAL:

- 1.1) FOAM: ETHYLENE PROPYLENE NEOPRENE SBR CLOSED CELL, FLAME RETARDANT, 0.125" THICK, PER ASTM D1056 2A2, SERVICE TEMP -40°F TO +200°F, COLOUR: BLACK, REF. TULMAR P/N 1637-002
- 1.2) FABRIC: 100% 420 DENIER NYLON, MIN THREAD COUNT 35X35, POLYURETHANE COATED ONE SIDE, COLOUR: BLACK, REF. TULMAR P/N 1485
- 1.3) ADHESIVE: URETHANE WITH CATALYST, TWO PART, CLIFTON LA4009 OR LA4009NOVOC.
- 1.4) THREAD: NYLON, BLACK, V-T-295 TYPE 2, CLASS A, SIZE F, 8-10 STITCHES PER INCH, REF. TULMAR P/N 2530
- 2) FINISH: BOND NEOPRENE TO COVER PLATE USING ADHESIVE. COVER WITH DENIER AS SHOWN.
- 3) TOLERANCES: PER TABLE 1 (ZN A3-1) UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.42 lbs REF
- 8) NUTPLATES AND HOLES MUST REMAIN FREE OF ADHESIVE AND FABRIC
- 9) DENIER NYLON TO OVERLAP BY 0.25 MIN AND BE BONDED ALL AROUND INNER SIDES OF PLATE

DAS
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9-89

16.01.27

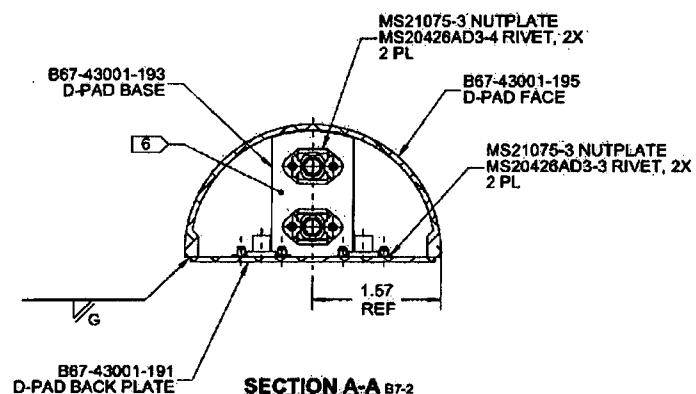
DAS
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9-89

TABLE 1
TOLERANCES ON FABRIC
(PARTS AND ASSEMBLIES)

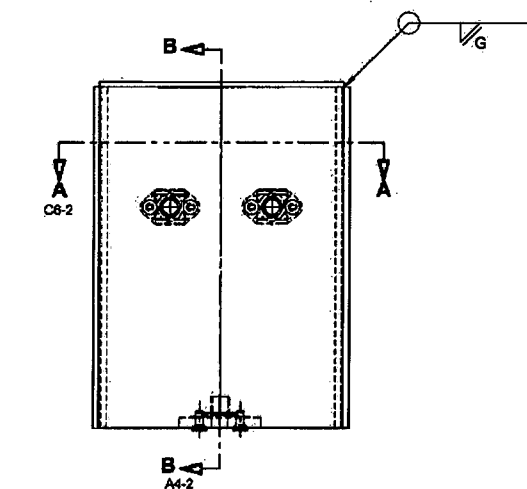
±1/8: DIMS <2
±1/4: DIMS 2 TO <10
±1/2: DIMS 10 TO <20
±3/8: DIMS 20 TO <40
±1.5%: DIMS EQUAL TO OR > 40

C	REDRAWN PREMIER AVIATION DRAWING IAW DART QSI 018, QSI 043 AND TULMAR SAFETY SYSTEMS INC.'S MANUFACTURING PROCESS AND TOLERANCES ON FABRIC. FOR PREVIOUS REVISIONS, REFER TO SHEET 12 OF PREMIER AVIATION DRAWING No. B67-43001. REASON: SEE PART008-011.		MB	10.04.27
REV.	DESCRIPTION		BY	DATE
DESIGN	RW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. B67-43001-85 TITLE D-PAD ASSEMBLY, LONG		
DRAWN				
CHECKED				
MFG. APPR.				REV. C
APPROVED				SHEET 1 OF 2
DE APPR.	N/A			SCALE
				NTS
DATE	10.04.27			
COPYRIGHT © 1986 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.				

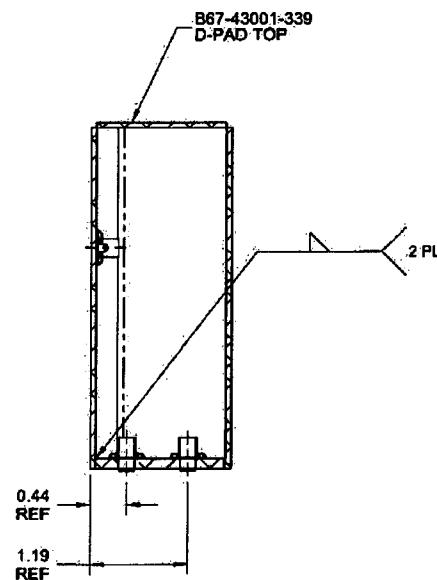
RELEASED
R 2010-09-15



SECTION A-A B7-2



B67-43001-85W D-PAD WELDMENT, LONG



SECTION B-B B7-2

ITEM	QTY	P/N	DESCRIPTION
1	X	B67-43001-85W	LONG D-PAD WELDMENT
2	1	B67-43001-191	D-PAD BACK PLATE
3	1	B67-43001-193	D-PAD BASE
4	1	B67-43001-195	D-PAD FACE
5	1	B67-43001-339	D-PAD TOP
6	4	MS20426AD3-3	RIVET
7	4	MS20426AD3-4	RIVET
8	4	MS21075L3	NUT PLATE

- NOTES:**
- 1) MATERIAL: NONE
 - 2) FINISH: POWDER COAT GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "B67-43001-85W" AND B/N "BXXXXX" USING FINE POINT PERMANENT INK MARKER
 - 7) WEIGHT: 0.42 lbs
 - 8) WELDING: PER DART QSI 004

RELEASED
2010-09-16
MB

DESIGN	RW	DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. B67-43001-85 .REV. C
MFG. APPR.		SHEET 2 OF 2
APPROVED		TITLE D-PAD ASSEMBLY, LONG SCALE NTS
DE APPR.	N/A	
DATE	10.04.27	COPYRIGHT © 1988 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS NOT TO BE USED FOR ANY PURPOSE OR COMMERCE OR CONSULTATION TO ANY OTHER FIRM OR INDUSTRY WITHOUT THE EXPRESS WRITTEN PERMISSION OF DART AEROSPACE LTD.

PACKING SLIP

TULMAR

Tulmar Safety Systems Inc.
1123 Cameron Street
Hawkesbury, ON K6A 2B8
Tel: 613-632-1282
Fax: 613-632-2030
GST R132478223
MID : XOTULSAF1123HAW
email: info@tulmar.com

Packing Slip No. Page

56789 1

Ship Date
2/23/2016

Bill To:

Dart Aerospace

1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Ship To:

Dart Aerospace

1270 Aberdeen Street
Tel: 613-632-9577
Hawkesbury, ON K6A 1K7
Canada

Order number	Sales order date	Account number	Loc	Account manager
33591	1/27/2016	CDART100	H	Francine Bigras
PO number	Ship via	Shipping Terms		
PO31110	Pick-Up	FOB HAWKESBURY		
Item No.	Quantity ordered	UOM	Qty Shipped/Returned	Quantity on back order
Description				

QA: A004 A005 A007 A016 A026 A040
A041 A043 (TSS = 5 YRS ONLY)

8421-103	15.00	EA	15.00
Cover Plate			

Drawing No: B67-43001-181
DWG Rev: D
Item 6

Lot no.: BATCH0000000010 15.00

8421-102	11.00	EA	11.00
D-Pad Assembly, Long			

Drawing No: B67-43001-85 + MU
DWG Rev: D+1

Lot no.: BATCH0000000010 11.00

8421-101	54.00	EA	54.00
D-Pad Assembly, Short			

Drawing No: B67-43001-83
DWG Rev: D

Lot no.: BATCH0000000012 54.00

8421-104	16.00	EA	16.00
Cover Plate			

Drawing No: B67-43001-173
DWG Rev: D
Item 7

Lot no.: BATCH0000000011 16.00

8421-105	16.00	EA	16.00
Cover Plate, 20°			

Drawing No: B67-43001-73+MU
DWG Rev: C+1
Item 2

Lot no.: BATCH0000000009 16.00



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO31110**

Purchase Order Date 1/22/2016

PO Print Date 1/28/2016

Page Number 2 of 4

Order From :
TULMAR SAFETY SYSTEMS
1123 CAMERON ST
HAWKESBURY, ON K6A 2B8
CA

VC-TUL001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 613 632 1282

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency CAD

FOB FCA - (Free Carrier)

Chantal Lavoie

3	138696	PB67-43001-33 UPPER PAD ASSEMBLY	2/19/2016	4.00	\$82.50	\$330.00
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Yes

2/19/2016

FOAM AND FABRIC
TULMAR P/N: 8421-107
INCLUDED MARK UPS AT REV.C +MU1

Line Total: \$330.00

4	138688	PB67-43001-85 D-PAD	2/19/2016	11.00	\$55.00	\$605.00
---	--------	---------------------	-----------	-------	---------	----------

Yes

2/19/2016

FOAM AND FABRIC
TULMAR P/N: 8421-102
INCLUDED MARK UPS AT REV.D + MU
MISSING ON DART DWG. "TRANSFER DIAM 0.19 HOLE FROM WELDMENT TO FABRIC 2PL"

Line Total: \$605.00

5	138691	PB67-43001-69 90 DEG. COVER PLATE	2/19/2016	15.00	\$160.00	\$2,400.00
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Yes

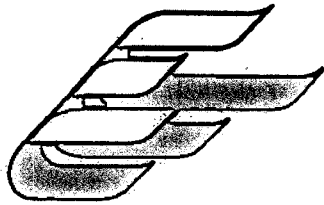
2/19/2016

FOAM AND FABRIC AS PER DWG PD67-43001-69 REV. D
TULMAR P/N: 8421-106

PO Instructions: SALES QUOTE NO. 16014,16058

Note:

1/28/2016



J. ENNIS FABRICS

June 10, 2015

Fax To: Tulmar Safety Systems
Fax: 613-632-2030
Attention: Sandra Nadeau

Certificate of Conformance

Re: PO 28594-00 for Oxford 7 black

The goods shipped on P/O 28594-00 are as per sampled goods. Specification as follows:
As per mill documentation:

Oxford 7 black is in compliance with the following standards:

Width: Product is 58 Inches Wide.

Roll Size: Average Roll Length is 75 Yards.

Weight: Product Weight is 6.79 Ounces per Sq.Yd. /Product Weight is 10.94 oz per Lin.Yd.

Content: 100% Nylon

Coating: Product has a Polyurethane Coating {approximately 0.65 oz/ Sq.Yd. (18.5g/sq.yd.)}

Denier: Yarn is 420 Denier.

Thread Count: Construction is 62 x 38 Threads per Square Inch

Protective Finish; Product is Water Repellent.

Hydro Resist: AATCC 127 (Suter): Average 800 mm

Piece # 111926200 Manufacture Date: 03/25/15, Lot Number: 444815

Sincerely;
J. Ennis Fabrics Ltd.

S. Nolan

Susan Nolan
Customer Service Specialist

C/c's used to mfg - B67-43001-83 Rev.D

B67-43001-85 Rev.D+1

*Reliberated (QC)
Feb. 23/16*

JUL 19 2015

1493 # 33



E.F. Walter Inc.	CERTIFICAT DE CONFORMITÉ CERTIFICATE OF COMPLIANCE		Approved <u>JF</u> Date <u>1/3/02</u>
Revision # 0	Revision date: January 30, 2002	Doc # F.7.5.5.A	Page 1 of 1

Date : 04/14/2009

VENDU À
SOLD TO

6048

TULMAR SAFETY SYSTEMS INC.
1123 CAMERON STREET
HAWKESBURY ONT
K6A 2B8

FOURNISSEUR
VENDOR

E.F. WALTER INC.
180 BARTOR ROAD
TORONTO, ONTARIO
M9M 2W6

Commande / Order # 15534-00

Notre / Our Reference # 59448

Nous certifions par la présente que la totalité du matériel inscrit ci-dessous a été inspecté et vérifié et est conforme aux devis et aux normes mentionnés sur votre commande.

We hereby certify that all of the material listed below has been inspected and tested and conforms to the drawings and / or specifications stated on your purchase order.

Item	Quantité Quantity	Pièce # Part #	Description
742012007	15 sheets	1637-002	SC 42 BLACK - TRIMMED - NO SKIN 1/8" TH X 42" X 72"
			LOT# 84277 MFG DATE: 03/22/09

Signé
Signed

TSS # 1637-002/02

TULMAR**Certificate of Conformance**

Tulmar P/N 2530	Description Tyrod, Nylon, Black, AA-59226, TYT, CUA-524 F, Quality Claims - G-0, Country of Origin USA MS C0332	Dwg #	Revision	Qty 40 Spl
Tulmar PO # 27000-00	Line Item # 1	Supplier Name / Address CANSEW INC, 111Chabanel West, Suite 101, Montreal, Que., H2N 1C9	Supplier Packing Slip # H66082	

Supplier Declarations:

Hazardous Materials Acknowledgement	The items described below may contain, and their processing may have included, the following substances:	Hexavalent Chromium; Cadmium; Beryllium; Nickel; Mercury; Lead; Asbestos; Radioactive elements YES ☐ NO ☒
Country of Origin of Goods : USA		if YES, please complete the HazMat Acknowledgement form @ www.tulmar.com
Limited Shelf-Life	<u>Definition:</u> If material is consumed or transformed into final product before end of shelf-life there is no effect on final product.	These items have a limited Shelf-Life YES ☐ NO ☒ if YES, please complete the Time Expired - Shelf-Life questionnaire @ www.tulmar.com
Expiry date	<u>Definition:</u> Date after which performance will no longer be as intended - expiration is transferred to the final product.	These items have an expiry date YES ☐ NO ☒

Additional Information (MRS#, MRA#, limitations, etc...):

I hereby certify that the goods listed hereon have been inspected and/or tested, as applicable, and conform to all specifications and requirements detailed in the contract or purchase order and relevant quality clauses. Objective evidence to support this statement is on file and can be made available upon request. Should further information be required, please contact:

Signature 	Name Hershie Schachter	Date (DD-MMM-YY) 28-Jan-2014
Title President	Email hershie@cansew.ca	Phone # (514) 382-2807

Form Revision 13 Aug 2012

2530/53**(SN)**



48 Burgess Place
Wayne, NJ 07470

Certificate Of Analysis

11/11/2015

Sales Order Number: 5927

Customer Order Number: 29283

Manufactured for
TULMAR SAFETY SYSTEMS

14172-C6.9A

LA4009NOVOC, P/N 7122-001

14172-C6.9A - LA4009NOVOC, UNLINED GALLON CAN

Lot# PNJ-1015-0252

Qty: 52 EA

Manufacture Date: 11/4/15

Expiration Date: 11/4/16

Test(s)	Results	Min	Max	
% Solids @275F for 30 minutes	14.3000	13.00	15.00	Percent
Brookfield, RVT, #3 Spindle, 20RPM, 78F	1,150.0000	800.00	1,500.00	Centipoise
Visual check for dry film color	pass	(CLEAR TO HAZY YELLOW) PASS/FAIL		

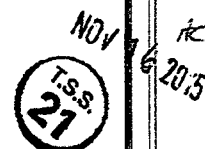
"The material supplied conforms to all applicable engineering drawing, specifications and PO requirements."

Dan Constantino

Daniel Constantino

Quality Assurance Mgr/ISO Coordinator

Country of Origin: USA



7122-001 B#5